

Thinking Processes Impaired by Dementia*

1. **Judgement***: ability to problem solve and consider outcomes, consequences or risks
2. **Attention***: ability to stay on task, to concentrate
3. **Perception***: ability to interpret one's senses (sights, smell, touch, taste and sounds)
4. **Reasoning***: cause and effect realization, ability to bargain & negotiate, perception or appreciation of levels of danger and risk
5. **Organization***: planning, initiating, following through with an activity
6. **Memory***: ability to store, retain and retrieve information (especially short-term memory)
7. **Communication***: giving and receiving verbal and non-verbal language
8. **Abstract Thinking***: ability to perceive concepts, hold multiple thoughts simultaneously
9. **Orientation to Time and Place**: know the current day, date, time, location, purpose for being somewhere
10. **Awareness of Socially Appropriate Norms**: impulse control, respecting others' space, values, etc.
11. **Ability to Filter Emotional Responses**: Use "common sense", or other information to gauge or moderate one's emotional reactions

Dementia is an umbrella term describing many conditions that cause cognitive impairment. Some are reversible/treatable. Alzheimer's disease is one type of dementia.

A dementia diagnosis can be made if cognitive impairment is occurring in two or more of the above starred *areas, and declines are severe enough to cause impairment in social and occupational functioning. Importantly, the decline must represent a decrease from a previously higher level of function (not be a low function that has always been present).

All of these functions are eventually impaired during the declining course of Alzheimer's disease.

Progressive Declines of Alzheimer's Disease & Related Dementia: Physical Changes That Effect Perception of the Environment

Sensory Overload - too much information coming at the person for her to process it and make sense of it – this can cause a catastrophic reaction (i.e., emotional outburst)

Out of Sight Out of Mind - things outside of the person's visual field are not perceived as present or in the person's awareness

Tunnel Vision – narrowing of the perimeters of the visual field (peripheral vision)

Depth Perception Problems – items that don't have much contrast are perceived as being continuous; patterns or color contrasts are perceived as having different depths even when they don't

Preoccupation with Small/Busy Patterns – small prints may seem to resemble lint or bugs, person may try to remove them from the fabric. Busy patterns can be confusing or cause sensory overload resulting in agitation, preoccupation or repetitive behavior

Visual Cliffs – dark or black surfaces are perceived as cliffs or holes

Loss of Reading Skills – unable to read sentences first, then eventually words (can read sentences if words displayed individually from top to bottom, instead of from left to right)

Visual Cues – when items are in the person's line of sight, they trigger the person's attention, and association with a particular response or activity (e.g., coat = go outdoors)

Repetitive Themes – subjects or situations that the person tends to return to frequently through questioning, talking about, searching for, or rummaging for, etc. These themes usually relate to important people, emotionally charged events, fears, occupations, habits/routines or things that provide/provided the person with a sense of security or importance

Heightened Intuition - loss of reasoning ability to navigate the environment leads to higher sensitivity to others' emotions as a survival strategy (instead of using reasoning process to find one's way around). This includes heightened startle response to loud noises or being touched from behind.

*Remember, the perception is reality for the person with dementia, even if it isn't true.

Things to Avoid When Adapting Environments For People with Dementia

1. Devices that require complex/new learning

- Especially if they are outside the scope of the person's past frame of reference (e.g., lifeline, some medication reminders, complex high tech phones, etc.)

2. Things that are outside of the person's field of vision

- People with dementia get tunnel vision – “out of sight out of mind”
- Work from the front of the person (e.g., have them use grab bar by facing it and pulling self up to do transfers - instead of person bracing self from behind to sit)

3. Things that can be misperceived in person's faulty depth perception

- Busy, small patterns look like bugs, lint, etc. – can agitate and/or preoccupy the person
- Colors between walls, floor and furniture/fixtures that have no contrast can cause a lack of perception and falls
- Dark colors or shadows look like holes
- Shiny floors look like water

4. Things that are foreign to a person's past and routines

- Adult Incontinence Briefs (i.e., "Depends") with side fastening tabs - look like diapers, though not the type used on their children. Can create confusion for the person with dementia because object is too complex to figure out and use on person's own, can cause feelings of frustration, dependency, upset and a loss of dignity, etc.
- If person is relocating to a new or different environment (a move, hospital or rehab stay) include items in the new environment that are familiar and meaningful, to ease the disorientation (favorite blanket, robe, pictures, furniture arrangements, music, etc.)

5. Situations that make the person feel too dependent, “ill”, or go against person's values

- For some older adults, cultural beliefs say that seeing a medical professional can be a sign of weakness; seeing a mental health professional means you're crazy, etc. (instead work from trusted, existing support people in the person's life - e.g., rabbi, neighborhood visiting nurse, professional family friend, etc.)
- Situations that trigger fears of becoming a physical or financial burden to the family
- Surroundings that give the person a feeling of being “institutionalized”, confined or may have a lack of activities or options

6. Interventions that cause the person to feel loss of control over life or a loss of personal dignity

- Offer choices and options for the person when planning changes in his life and environment, allow person to participate in whatever ways he can in the planning process, allow him to be accompanied by someone he trusts as an advocate when making decisions, etc.